

Abstract of the Disclosure

An improved sorbent cartridge for use in preparing fluid samples by solid phase extraction for chemical analysis is provided that uses a pipette having a longitudinal axis and a tip having walls defining a uniformly tapered interior cavity extending along the axis and opening at a distal end of the tip. A porous barrier is placed in the tapered cavity at a predetermined location in the tip to define a sorbent volume between the barrier, the cavity walls and the opening at the distal end of the tip. The barrier allows processing fluids to pass through the barrier while retaining the sorbent. A slurry of sorbent material is drawn into the sorbent volume by a syringe in fluid communication with the pipette tip. The solvent is drawn through the barrier, filling the sorbent volume with sorbent material. A serum to be analyzed is similarly drawn into the sorbent through the opening in the distal end of the tip, by applying a suction to the tip. After interacting with the sorbent material, the serum is further drawn through the barrier into the syringe and removed for analysis or use.